

—  
**THE BOSE**

—  
**CE-1**

—  
**CONTROL**

—  
**EXPANDER™**

—  
**UNIT**  
—

**PRELIMINARY VERSION**

—  
**OWNER'S GUIDE**  
—

**BOSE**

## Warning

To reduce the risk of fire or electric shock, do not expose this system to rain or moisture.

## Caution

To reduce the risk of shock, do not remove the cover of this system. There are no user-serviceable parts inside. Refer servicing to authorized service personnel.

The CAUTION marks shown on this page are located on the back of your system.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage"

within the system enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle, as marked on the system, is intended to alert the user to the presence of important operating and maintenance instructions in this owner's guide.

### CAUTION

RISK OF ELECTRICAL SHOCK—DO NOT OPEN

TO PREVENT ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

## Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

## Safety instructions

- 1. Read instructions** – Read all the safety and operating instructions before the unit is operated.
- 2. Retain instructions** – Retain the safety and operating instructions for future reference.
- 3. Heed Warnings** – Adhere to all warnings on the unit and in the operating instructions.
- 4. Follow instructions** – Follow all operating and other instructions.
- 5. Water and Moisture** – Do not use the unit near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
- 6. Power Sources** – Connect the unit to a power supply only of the type described in the operating instructions or as marked on the unit.
- 7. Nonuse Periods** – Unplug the power unit from the outlet when left unused for a long period of time.
- 8. Object and Liquid Entry** – Take care so that objects do not fall into and liquids are not spilled into the inside of the unit.
- 9. Cleaning** – Clean the unit only as directed by Bose<sup>®</sup> Corporation.
- 10. Damage Requiring Service** – The unit should be serviced by authorized service personnel when:
  - A. The power-supply plug has been damaged, or
  - B. Objects have fallen or liquid has been spilled into the unit, or
  - C. The unit has been exposed to rain, or
  - D. The unit does not appear to operate normally or exhibits a marked change in performance, or
  - E. The unit has been dropped or the cabinet damaged.
- 11. Servicing** – Do not attempt to service the unit in any way beyond those means described in the operating instructions. All other servicing should be referred to authorized service personnel.

**Note:** *This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.*

*Le présent appareil numérique n'émet pas aucun bruit radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des communications du Canada.*

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## What the CE-1 Control Expander™ unit does

Thank you for purchasing this Bose® CE-1 Control Expander unit. We believe it will make the components connected to your Lifestyle® music system easier to operate.

The CE-1 Control Expander unit uses signals from the Lifestyle® system's remote to control components like your tape recorder or CD changer. It converts the Lifestyle® remote's radio frequency signals into infrared signals that work with these other components.

To use the unit successfully, it is important to understand its operating principles, connections, and placement requirements.

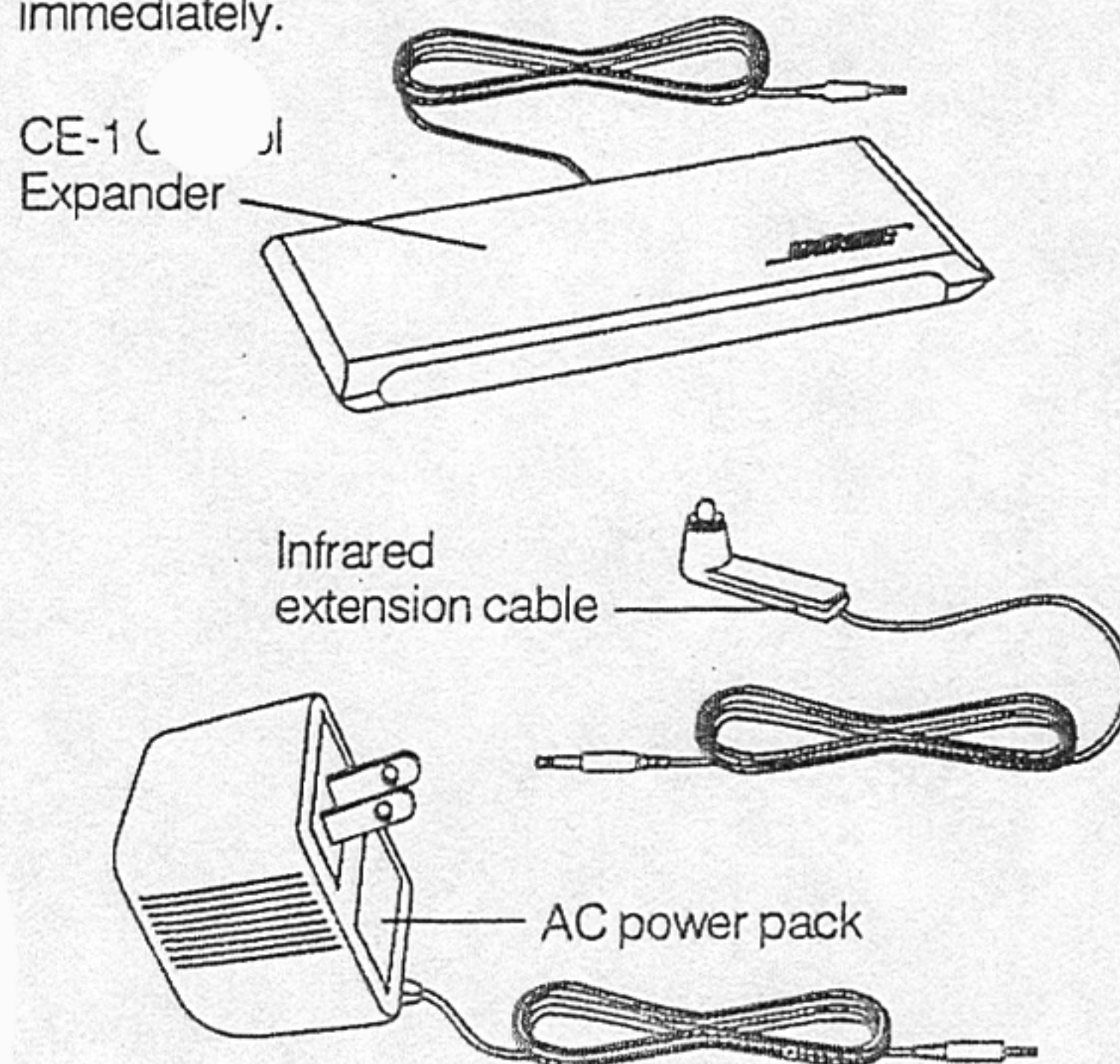
## Please read this owner's guide

This guide tells you how to install the CE-1 Control Expander properly. It also explains how you can use it to make your Lifestyle® music system more versatile.

**The carton contains:** (See Figure 1)

- One (1) CE-1 Control Expander
- One (1) infrared extension cable
- One (1) AC power pack
- A list of compatible components

Carefully unpack the carton. Save all packing material for possible future use. If any parts appear damaged, do not attempt to use the CE-1 Control Expander. Instead, repack the carton and notify your authorized Bose dealer immediately.



**Figure 1**

What comes with the CE-1 Control Expander

## How the CE-1 Control Expander™ unit works

Your new CE-1 Control Expander lets you control infrared-sensitive CD changers and tape decks using only the Lifestyle® remote.

The Lifestyle® remote uses radio frequency signals that penetrate walls. This is what allows you to operate your music system from anywhere in your home. But you need infrared signals to control a conventional CD changer or tape deck attached to the music center.

The CE-1 Control Expander unit turns radio frequency signals into infrared signals. This enables your CD changer or tape deck to respond to commands from the Lifestyle® remote control.

## Placement considerations

You will be connecting the CE-1 Control Expander unit to your Lifestyle® music center. You will also plug it into an electrical (AC-mains) outlet. These connections will be discussed in detail later.

You will need to place the CE-1 Control Expander within view of your CD changer and tape deck. It beams infrared signals to them in the same way a conventional remote does.

### Getting the signals to their target

The CE-1 Control Expander casts a wide beam of infrared light. Hard surfaces such as walls, doors, furniture, and glass panels reflect these signals. So the unit usually doesn't need special placement or positioning to control your CD changer or tape deck.

Notice the dark red plastic lens along the front edge of the CE-1 Control Expander. You can aim this lens directly at the components you want to control (see Figure 2). Or place the unit where its signals will reflect off a hard surface to reach your components (see Figure 3).

**Note:** If you find these choices impractical, you can use the infrared extension cable instead. Refer to "When to use the infrared extension cable" on page 12.

### Side by side



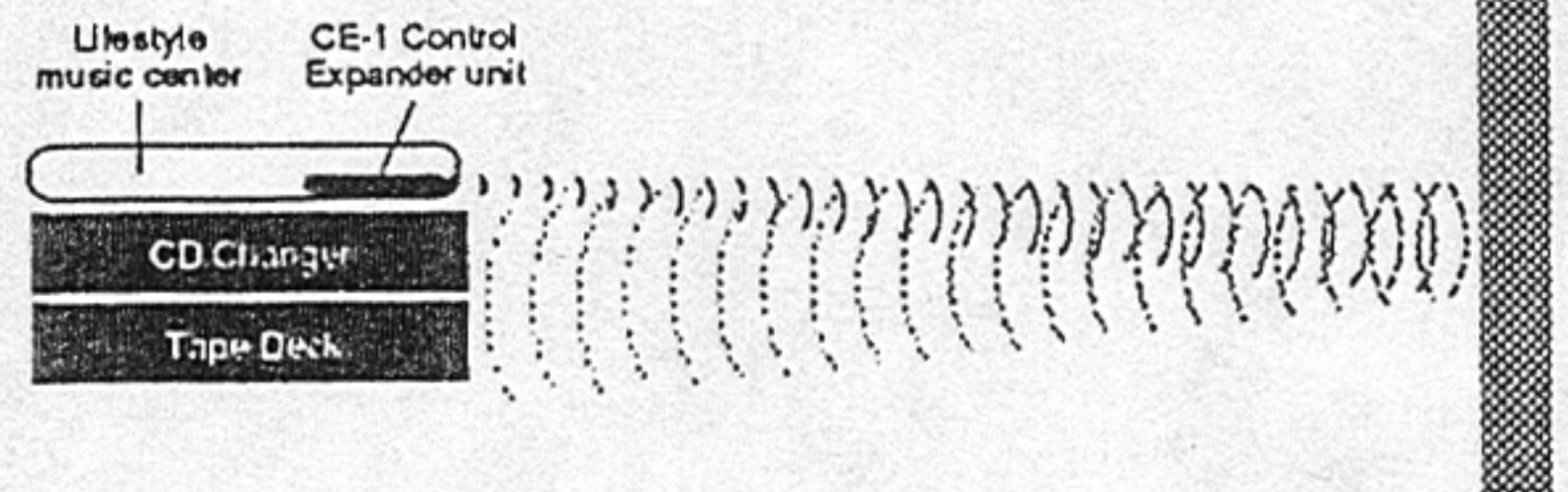
**Figure 2**

You can aim your CE-1 Control Expander directly at your CD changer and tape deck.

### Choosing a convenient location

Keep in mind that you will want your CD changer and tape deck where they are easy to reach. You can place them (with the unit) in an open cabinet or a bookcase. Or you might want them all out of sight in a cabinet, a closet, or another room.

### Side by side



**Figure 3**

Using a hard surface to reflect the signals from the CE-1 Control Expander.

### Making the cables longer

Your CE-1 Control Expander unit's 6-foot (2 m) cable connects to the Lifestyle® music center.

If you want to place your unit farther from the music center, you can lengthen this cable by 30 feet (10 m). Simply connect it to one or more 3.5 mm stereo-headphone extension cables, available from your retail dealer.

You may also want to place your CD changer or tape deck farther from the music center than their cables allow. Many components work with cables much longer than their supplied 6- or 8-foot (2- or 2.5-m) audio cables. Consult your component owner's manual, your retail dealer, or the manufacturer for details.

You don't need to choose a permanent setup now. You may want to complete your connections and test for proper system operation, first.

## Connect each component to your Lifestyle® music center

Refer to Figure 4.

Many manufacturers supply one or two cables with their components. These cables usually have color-coded connectors: the red plug is for right (R), the black or white plug is for left (L).

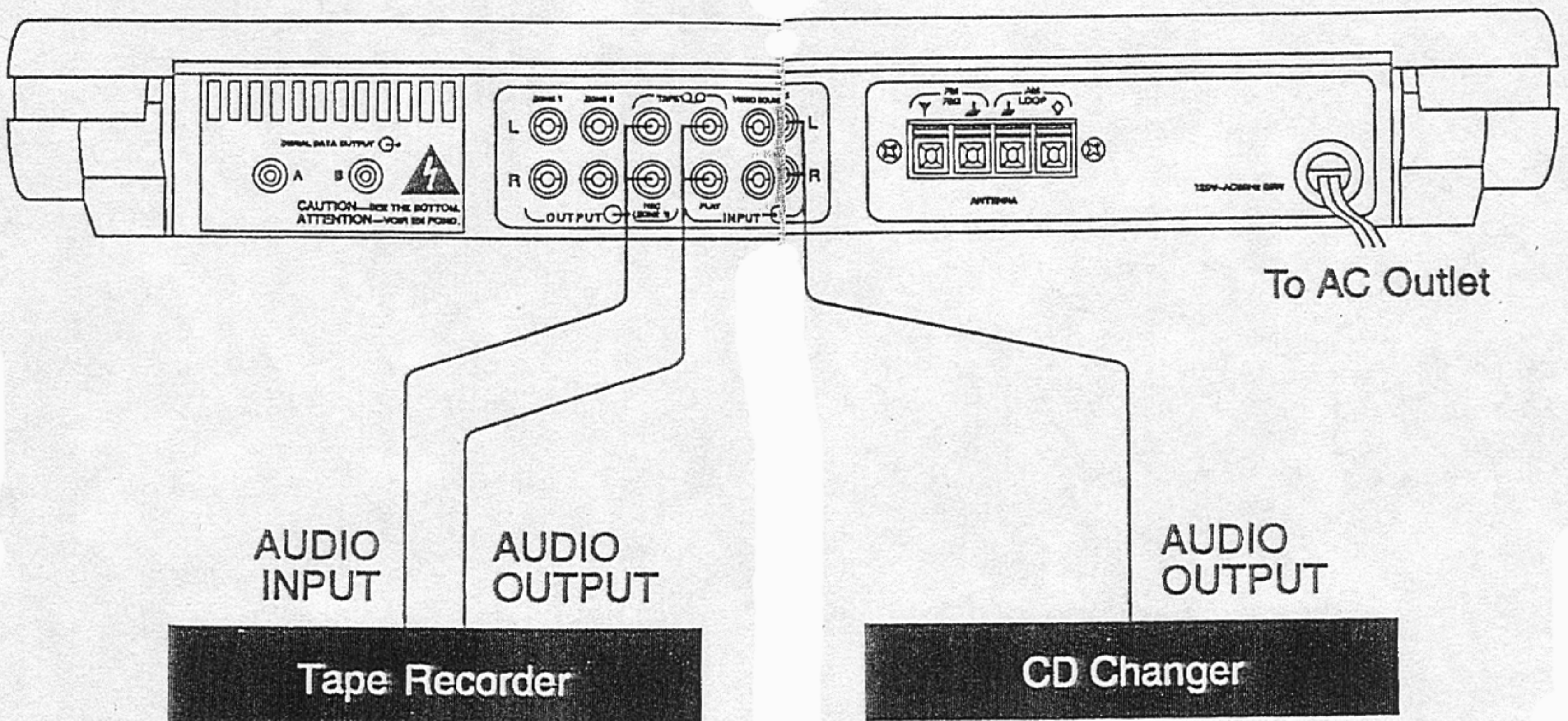
### To connect your CD changer, use one cable

1. Insert the red plug at one end into the CD changer's right (R) AUDIO OUTPUT. Insert the black or white plug into the left (L) AUDIO INPUT. (There may be two sets of outputs on your changer – fixed and variable. If so, use the fixed outputs.)
2. Now, at the other end of the same cable, insert the red plug into the Lifestyle® music center's right (R) AUX INPUT. Insert the black or white plug into the left (L) AUX INPUT.

### To connect your tape deck, use two cables

1. Pick one cable. Insert the red plug at one end into the deck's right (R) AUDIO OUTPUT. Insert the black or white plug into the left (L) AUDIO INPUT.
2. At the other end of the same cable, insert the red plug into the Lifestyle® music center's right (R) TAPE (or PLAY) INPUT. Insert the black or white plug into the left (L) TAPE (or PLAY) INPUT.
3. With the second cable, insert the red plug at one end into the deck's right (R) AUDIO INPUT and the black or white plug into the left (L) AUDIO INPUT.
4. At the other end of this cable, insert the red plug into the Lifestyle® music center's right (R) TAPE (or REC) OUTPUT. Insert the black or white plug into the left (L) TAPE (or REC) OUTPUT.

**Note:** If you need more detailed connection information, refer to the owner's manuals for your Lifestyle® music center and your components.



**Figure 4**

Use one cable to connect your CD changer and two cables for your tape deck.

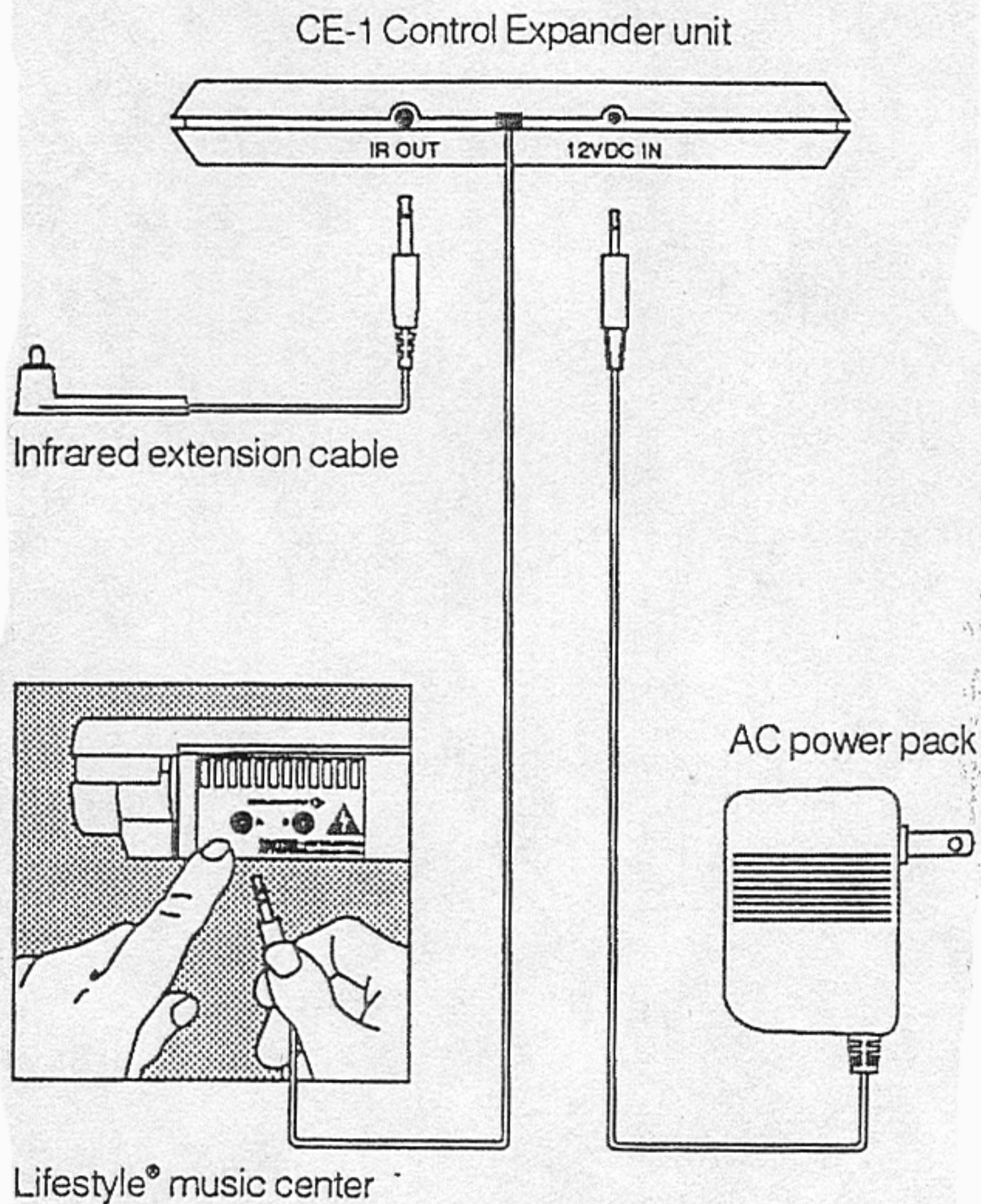
## Connect the CE-1 Control Expander™ unit

Refer to Figure 5.

### To connect it to your Lifestyle® music center

**Note:** You may want to refer to the owner's manual for your Lifestyle® music center before you proceed.

For proper operation, the cable attached to the CE-1 Control Expander unit must connect to your Lifestyle® music center. You may connect the cable directly, or use a short extension cable.



**Figure 5**

Making the CE-1 Control Expander unit connections.

### ● When making a direct connection

You will use only the cable attached to the unit. Simply insert the end plug on this cable into a SERIAL DATA OUTPUT or SYSTEM CONTROL jack on the rear panel of your Lifestyle® music center.

**Note:** Some Lifestyle® music centers have SERIAL DATA OUTPUT jacks and some have SYSTEM CONTROL jacks. If these jacks are already in use, you will need a 3.5 mm stereo Y-adaptor. Adaptors are available from your retail dealer.

### ● When using an extension cable

You will need to attach a 3.5 mm stereo-headphone extension cable to the CE-1 Control Expander™ unit's cable. Make sure your extension cable is no more than 30 feet (10 m) long. Extension cables are available from your retail dealer.

1. Connect the unit's cable to one end of your extension cable.
2. Connect the other end of the extension cable to the SERIAL DATA OUTPUT jacks or the SYSTEM CONTROL jacks on the back of your Lifestyle® music center.

### To plug the unit in

Use the AC power pack that comes with it.

1. The power pack has a cable attached. At the end of the cable is a small connector. Insert that connector into the 12VDC IN jack on the rear panel of your unit.
2. The power pack also has a wall plug. Plug this into a convenient electrical (AC-mains) outlet.

## When to use the infrared extension cable

The infrared extension cable is a flexible wire. It has a connector at one end and an infrared light-emitting diode (LED) at the other. It works as an alternative for directing infrared light signals to your components.

Use the infrared extension cable in the following situations:

- When your room size or style makes proper placement of the CE-1 Control Expander™ unit difficult. In a large, open room, the unit's infrared light may not reach your auxiliary components.
- When you place your components where the CE-1 Control Expander can aim at only one.
- When you want the CE-1 Control Expander to be unobtrusive.
- When the infrared sensor on your component is not sensitive enough to respond.

### To connect the infrared extension cable

1. Insert the cable's connector into the IR OUT jack on the rear panel of your CE-1 Control Expander unit (refer to Figure 5 on page 10).
2. Place the LED end of that cable in front of your component(s). Make sure the broad infrared beam reaches the remote-control sensor on the component's front panel.

### To make the infrared extension cable longer

You will need a cable with 3.5 mm connectors at each end, one male and one female. You may add up to 100 feet (30 meters) of cable to the infrared extension cable. Electronics stores often carry 25-ft (7.5-m) lengths of this cable.

## Making your unit work with different components

To control your components, the CE-1 Control Expander™ unit must identify each one. You need to enter a 3-digit code into the unit to give it this identity. After you enter the proper code for each component, you won't need to change it unless you add or change components.

**Note:** Entering a wrong code will not harm your converter or your components.

### To find the right code for your component

Refer to the list of compatible product brands. Find the type of product – CD changer or tape deck (or some other component) – first. Then locate the particular brand you own.

**Note:** Product model names may change, but their control codes often remain the same. You may need to try more than one code for the brand of your particular CD changer or tape deck.

If none of your component brand codes work with the CE-1 Control Expander, please contact your dealer for assistance. Or call Bose® Corporation directly. Refer to our telephone numbers listed in the "For customer service" section on page 17.

This may be necessary for new products that require new codes. If your unit is not programmed for these codes, it can be reprogrammed.

### To record each component's code

Write the code for each component in the table below. You may want to use a pencil.

Component type	Brand	Its 3-digit code
(current) CD Changer	_____	___ ___
(current) Cassette Deck	_____	___ ___
(new) _____	_____	___ ___
(new) _____	_____	___ ___

### To enter a code into your CE-1 Control Expander

Make sure your unit is connected to your Lifestyle® music center.

**Note:** Refer to your music center's owner's manual. If you find instructions in that manual for entering codes, follow those instructions. The following steps apply only when using the original Lifestyle® music system. It has a 34-button remote control (see Figure 6 on the next page).





### Making sure all CD tracks can be directly selected

1. You will need to load a disc with 10 or more tracks into your changer. Make sure you have verified basic operation as described above.
2. Check selection of tracks 1, 9, and 10. Press the following keys:  
1-PLAY; 9-PLAY; 1-0-PLAY
3. If any track was not selected properly, examine the remote control that came with your CD changer. Identify it in the table below. Now, using the Lifestyle® remote control, press the AUX key and follow the instructions that apply:

#### Your Changer's Remote Has:

#### Press Lifestyle Remote Keys:

Keys 0 to 9 .....	SET-SET-0-PLAY
Keys 0 to 9, and a +10 or >10 key .....	SET-SET-1-PLAY
Keys 1 to 10, and a +10 key .....	SET-SET-2-PLAY
Keys 1 to 10, and a >10 or >20 key .....	SET-SET-3-PLAY
Limited access to available keys only ..	SET-SET-4-PLAY
A key marked SHIFT .....	SET-SET-5-PLAY

**Note:** After pressing the Lifestyle® remote keys as indicated, your CE-1 Control Expander™ unit will flash once. If it does not, simply start over by pressing SET-SET, the correct digit, then PLAY.

4. Now repeat Step 2, above, to verify that all CD tracks can be directly selected.

### Making sure all discs can be directly selected

**Note:** This applies only to changers that have the direct access function.

1. Make sure that you have at least three discs loaded in your CD changer.
2. Using the Lifestyle® remote control, press AUX, then 3, then the Blank key (lower right on the remote control).
3. Operation is correct if your changer begins to play disc 3. If not:  
Press CHECK-CHECK-1-PLAY

**Note:** If you are using a Pioneer 18-disc changer, you will need to press:

CHECK-CHECK-2-PLAY

**Note:** Your CE-1 Control Expander will flash once.

Now, your Lifestyle® remote control should operate your CD changer properly. If your problem persists, see "For customer service" on page 19.

### To select discs and tracks on your CD changer

**For a specific track,** first press the number of the track, then press PLAY.

**For Example:** To go to track 14, press:  
1-4-PLAY.

**For the next disc,** press the Blank key (lower right on the remote control).

**Note:** This will work only if your changer has a next disc function.

**For a specific disc,** press the number of the disc, then press the Blank key.

**For Example:** To go to disc 4, press:  
4-[Blank].

**Note:** This will work only if your changer has a direct access function.

## If you have problems operating your CD changer

You may need to try several different codes to find the one that lets the Lifestyle® remote control operate your changer.

Some manufacturers have used many different control codes for their CD changers over the years. Or they have used one control code for several different changer models.

If you are having trouble with direct selection of discs and tracks, follow this procedure:

### Make sure your CD changer works with its own remote control.

1. Turn on your CD changer. Now follow the instructions in your CD changer's manual to verify proper operation. Use the Play/Pause, Fast Forward, Fast Reverse, Skip Forward, Skip Back, and Stop keys.
2. Using a disc with 10 or more tracks, go directly to track 10.
3. Make sure you can go directly to any disc from any other disc.

### Make sure your CD changer works with the CE-1 Control Expander™ unit.

1. Refer to "Making your unit work with different components" and "To enter a code into your CE-1 Control Expander unit" on page 13. Make sure you have followed those procedures properly.
2. Check operation of the Lifestyle® music center's remote control. Try the PLAY/PAUSE, FF (Fast Forward), FR (Fast Reverse), SKIP Forward, SKIP Back, and STOP keys. Refer to "Using your Lifestyle® remote control to operate components" on page 15.
3. If your CD changer still does not operate, try entering another control code for the same brand of changer.
4. Now, repeat Step 2 to make sure the CD changer works with your Lifestyle® remote.

**Note:** Manufacturers may introduce new products with new control codes. To use your CE-1 Control Expander with these products, you will need to have it re-programmed. To arrange for this, please contact your retail dealer or call Bose® Corporation directly (refer to "For customer service" on page 19).

## For customer service

If you are having trouble with your CE-1 Control Expander™ unit, contact your authorized Bose® dealer. The dealer will verify any defects and arrange for service by an authorized service agency or by the Bose factory. Bose Corporation will make every effort to remedy any problem within the terms of the limited warranty.

### For information or service:

#### USA

1-800-444-BOSE (2673)  
8:30 a.m. to 9 p.m. ET.

#### Canada

1-800-465-BOSE (2673)  
9 a.m. to 5 p.m. ET

#### European Headquarters

Bose DISTCO B.V.,  
Nijverheidstraat 8,  
1135 GE Edam, Holland

TEL (31) 2993-71055  
FAX (31) 2993-68163

#### Australia

Bose Australia, Inc.,  
11 Muriel Avenue,  
Rydalmere, N.S.W. 2116

TEL (02) 684-1022  
FAX (02) 684-1665

#### Belgium

Bose N.V., Essenestraat 15,  
1740 Ternat

TEL 02-5826200  
FAX 02-5823717

#### Denmark

Bose A/S, Industrivej 7,  
2605 Brøndby  
TEL 4343-7777  
FAX 4343-7818

#### France

Bose SARL, 6,  
Rue Saint Vincent,  
78100 St-Germain-en-Laye,  
France

TEL 01-30610461  
FAX 01-30614105

#### Germany

Bose GMBH,  
Max-Planckstrasse 36,  
6382 Friedrichsdorf,  
Postfach 1125

TEL 06172-71040  
FAX 06172-710419

#### Holland

Bose B.V., Nijverheidstraat 8,  
1135 GE Edam

TEL 02993-66661  
FAX 02993-68166

#### Ireland

Bose Ireland,  
Castleblayney Road,  
Carrickmacross,  
Co Monaghan

TEL 042-61988  
FAX 042-61998

#### Italy

Bose SPA,  
Via Luigi Capucci 12,  
00147 Rome

TEL 06-5127641/2  
FAX 06-5115438

#### Spain

Bose Products B.V.  
Sucursal en España,  
Avda de Aragón 334,  
Polígono Las Mercedes,  
28022 Madrid

TEL 01-3290210  
FAX 01-7472080

#### Switzerland

Bose A.G.,  
Rünenbergerstrasse 13A,  
4460 Gelterkinden

TEL 061-995544  
FAX 061-995502

#### United Kingdom

Bose U.K. Ltd.,  
Trinity Trading Estate,  
Sittingbourne,  
Kent ME10 2PD

TEL 0795-475341/5  
FAX 0795-427227

#### Other Locations

Bose Service Department,  
Otis Street Park, Building 3,  
PO Box 5045,  
Westborough,  
MA 01581-5045 USA

TEL (508) 366-9896  
FAX (508) 872-6541